



No.	Author Steven E. Backs, Wildlife Research Biologist	Date
925	Title 2006 Fall Wild Turkey Harvest Results	2/6/2007

Abstract: *Hunters harvested 646 wild turkeys in 57 of the 74 counties to open hunting during the second modern day fall wild turkey hunting season. The 2006 fall harvest was 9.8% less than the 716 birds taken during the first fall turkey season in 2005. The 18 day archery-only season accounted for 26% of the harvest with 74% of the harvest occurring the last 5 days of the combined shotgun and archery season. Weekends accounted for 50% of the total harvest with 37% during one weekend of the combined archery and shotgun portions. Juvenile birds made up 21% of the harvest while adults composed 79% for a juvenile to adult ratio of 1:4. The high adult proportion was probably related to a combination of hunter selectivity, below average brood production in 2006, and the high production in 2004. Counties harvesting at least 25 birds ($\geq 4\%$ of harvest total) were Harrison, Clark, Crawford, Warrick, and Pike counties.*

Work Plan: # 204290 (Formerly Federal Aid Study/Job No.: W-26-R; Job 16-G-5).

The 2nd modern day fall wild turkey hunting season in Indiana was held from October 1-22, 2006. The archery-only portion of the season occurred from October 1-17 in 74 counties. The combined shotgun and archery portion occurred from October 18-22. Shotgun hunting was limited to 26 counties in the south-central and southeast regions of the state. Hunters harvested a total of 646 birds during the entire season with 171 (26%) taken during the archery-only portion and 475 (74%) taken during the combined shotgun and archery portion (Table 1). The 2006 fall harvest was 9.8% less than the 716 birds taken during the first fall turkey season in 2005. Across both portions of the fall turkey season, archers harvested 232 birds (36%) while shotgun hunters took 400 birds (62%). Weekends accounted for 50% of the harvest with 13% during weekends of the archery-only portion and 37% on the one weekend of the combined shotgun and archery portion (Table 2; Figure 1).

Comprehensive lifetime license holders harvested 53% of the birds followed by resident fall turkey license holders (23%) with 10% of the harvest by license exempt landowners and active military on leave (Table 3). The number of resident fall turkey licenses dropped by 543 permits (-24%) while youth licenses increased by 3,752 (+19.5%) and nonresident fall turkey licenses increased from 20 to 30 permits sold. The resident licenses probably dropped off from the novelty of the first year of fall hunting (2005) while the youth license increase probably reflected interest in the new (2006) youth deer firearms season in late September.

The determination of the sex and age of harvested wild turkeys was done by hunters and check station operators using a combination of spur and fall plumage characteristics (wing and breast feathers) as depicted in illustrations provided in the "2006-2007 Indiana Hunting and Trapping Guide". Juvenile birds made up 21% of the harvest while adults composed 79% for a juvenile to adult ratio of 1:4 (Table 4). Adult hens composed the largest proportion (47.5%) of the harvest. Based on observations in other states, a high proportion of adults in the fall harvest, especially adult hens, generally occurs following poor summer brood production. Brood production in Indiana during the summer of 2006 was below average, however, the 2004 brood production was the highest ever recorded, leading to a high proportion of adults in the wild turkey population than would be normally expected. Based on the fall harvest experience and research in other states, adult males (AM) are generally the least vulnerable to fall harvest than the other sex/age cohorts. Hunter selection for larger birds when given the opportunity, also contributes to the high proportion of adults

and adult males in the Indiana fall harvests. Finally, the interpretation of the fall sex and age criteria by hunters and check station operators is an undetermined factor related to errors in sex and age determination. Accurate sex and age determinations of fall turkeys are a common problem, even in states with more fall turkey hunting experience.

Counties harvesting at least 25 birds ($\geq 4\%$ of the total harvest) were Harrison, Clark, Crawford, Warrick, and Pike (Table 5; Figure 2). Fifteen counties open to archery only hunting did not harvest a single bird. The proportion of the fall to spring harvest did not exceed 17% for any county open to fall hunting and the overall the total fall to spring harvest proportion was 4.9%. The conservative harvest structure of Indiana's fall turkey season and less hunter interest generally contributed to the low harvest. The above normal precipitation and the delayed crop harvest (standing corn and soybeans) during the fall turkey season were other possible contributing factors to the lower harvest.

Table 1. Fall wild turkey harvest by season and weapon used - Indiana, 2006.

Season	Archery Only		Both Shotgun & Archery		Weapon Totals	
Dates	1-17 October 2006		18-22 October 2006			
	<u>No.</u>	<u>%</u>	<u>No.</u>	<u>%</u>	<u>No.</u>	<u>%</u>
Bow	159	93%	73	15%	232	36%
X-Bow	12	7%	2	0%	14	2%
Shotgun	---	---	399	69%	399	62%
Muzzleloader SG	---	---	1	0%	1	0%
<i>Season Totals^a</i>	171	26%	475	74%	646	100%

^a Represents proportion of total harvest (646) taken during the archery-only or the combined shotgun and archery portions of the fall season.

These management and research notes are issued periodically to provide a quick source of information on wildlife surveys and investigations, and various wildlife programs prior to more formal reports. Any information provided is subject to further analysis and therefore is not for publication without permission.

Table 2. Fall wild turkey harvest by day of the 2006 season, Indiana.

Date	Day	No. Harvested	Percent of Total	Cummulative Totals ^a	Cummulative Percent
<i>Archery Only</i>					
10/1/2006	Sun	29	4.5%	29	4.5%
10/2/2006	Mon	6	0.9%	35	5.4%
10/3/2006	Tue	3	0.5%	38	5.9%
10/4/2006	Wed	13	2.0%	51	7.9%
10/5/2006	Thur	8	1.2%	59	9.1%
10/6/2006	Fri	10	1.5%	69	10.7%
10/7/2006	Sat	16	2.5%	85	13.2%
10/8/2006	Sun	16	2.5%	101	15.6%
10/9/2006	Mon	4	0.6%	105	16.3%
10/10/2006	Tue	5	0.8%	110	17.0%
10/11/2006	Wed	8	1.2%	118	18.3%
10/12/2006	Thur	9	1.4%	127	19.7%
10/13/2006	Fri	10	1.5%	137	21.2%
10/14/2006	Sat	18	2.8%	155	24.0%
10/15/2006	Sun	5	0.8%	160	24.8%
10/16/2006	Mon	8	1.2%	168	26.0%
10/17/2006	Tue	3	0.5%	171	26.5%
<i>Both Archery and Shotgun</i>					
10/18/2006	Wed	92	14.2%	92	14.2%
10/19/2006	Thur	56	8.7%	148	22.9%
10/20/2006	Fri	87	13.5%	235	36.4%
10/21/2006	Sat	131	20.3%	366	56.7%
10/22/2006	Sun	109	16.9%	475	73.5%
Total		646			100%

^a Cummulative totals listed by respective by archery-only and the combined shotgun-archery portions of the fall turkey season.

Fig. 1. Fall Turkey Harvest 2006

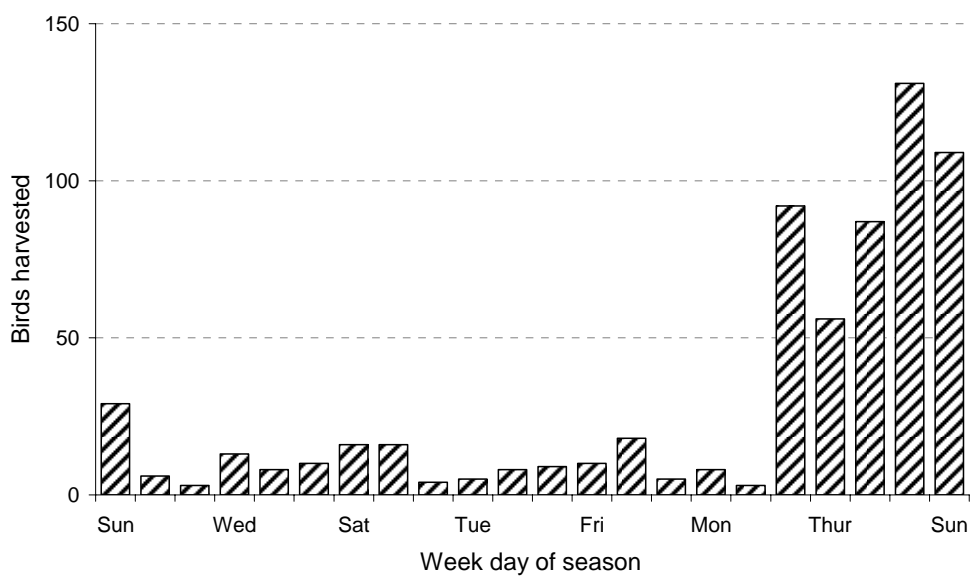


Table 3. Fall wild turkey harvest by permit type - Indiana, 2006.

Type of Permit	No.	%	No. Licenses Sold by Season End Date	Differences in Licenses sold from Prior Year (%)
Resident Fall Turkey	149	23%	1,682	-543 (-24%)
Non-Resident Fall Turkey	2	0%	30	+10 (+50%)
Comprehensive Lifetime	381	53%	43,028 ^a	----- ^a
Comprehensive Youth	43	7%	22,947	+3,752 (+20%)
Landowner/active military	65	10%	Unknown & Exempt	Unknown & Exempt
Total ^b	640			

^a Comprehensive lifetime hunt and hunt & fish license as of July 2005 when the lifetime licenses discontinued. Value represents the number of lifetime license holders who could potentially hunt.

^b Missing values for permit type = 6; actual total harvest = 646.

Table 4. Age and sex structure of the fall wild turkey harvest - Indiana, 2006.

	Juvenile ^a		Adult ^b		Total ^c	
	No.	% ^c	No.	% ^c	No.	% ^c
Male	54	8.6%	199	31.5%	253	40.1%
Female	78	12.4%	300	47.5%	378	59.9%
Total ^c	132	20.9%	499	79.1%	631	
					Juvenile : Adult	1 : 4

^a Juvenile were birds estimated to be < 6 months old.

^b Adults were birds estimated to be ≥ 14 months old.

^c Percents are based on 631 birds; sex/age not recorded for 15 birds of 646 total harvest.

Table 5. Fall and spring wild turkey harvests in Indiana, 2006. ^a

County	Type of Fall Season ^b	2006 Fall Harvest	Percent of Fall Harvest	2006 Spring Harvest	Percent of Fall / Spring
Adams	Not Open	---	---	0	---
Allen	Not Open	---	---	2	---
Bartholomew	Archery	5	0.8%	127	3.9%
Benton	Archery	0	0.0%	11	0.0%
Blackford	Not Open	---	---	Not Open	---
Boone	Not Open	---	---	0	---
Brown	Both	16	2.5%	287	5.6%
Carroll	Archery	---	---	4	---
Cass	Archery	0	0.0%	30	0.0%
Clark	Both	35	5.4%	342	10.2%
Clay	Archery	2	0.3%	161	1.2%
Clinton	Not Open	---	---	0	---
Crawford	Both	30	4.6%	376	8.0%
Daviess	Archery	2	0.3%	108	1.9%
Dearborn	Both	11	1.7%	489	2.2%
Decatur	Archery	1	0.2%	57	1.8%
DeKalb	Archery	0	0.0%	64	0.0%
Delaware	Not Open	---	---	Not Open	---
Dubois	Both	21	3.3%	262	8.0%
Elkhart	Archery	0	0.0%	19	0.0%
Fayette	Archery	0	0.0%	53	0.0%
Floyd	Both	11	1.7%	75	14.7%
Fountain	Archery	6	0.9%	177	3.4%
Franklin	Both	23	3.6%	399	5.8%
Fulton	Archery	4	0.6%	59	6.8%
Gibson	Archery	2	0.3%	120	1.7%
Grant	Archery ^c	0	0.0%	6	0.0%
Greene	Both ^c	14	2.2%	397	3.5%
Hamilton	Not Open	---	---	0	---
Hancock	Not Open	---	---	0	---
Harrison	Both	39	6.0%	431	9.0%
Hendricks	Not Open	---	---	5	---
Henry	Not Open	---	---	Not Open	---
Howard	Archery	1	0.2%	6	16.7%
Huntington	Archery ^c	2	0.3%	21	9.5%
Jackson	Both	21	3.3%	310	6.8%
Jasper	Archery ^c	0	0.0%	54	0.0%
Jay	Not Open	---	---	Not Open	---
Jefferson	Both	20	3.1%	461	4.3%
Jennings	Both	19	2.9%	317	6.0%
Johnson	Archery	1	0.2%	41	2.4%
Knox	Archery	2	0.3%	72	2.8%
Kosciusko	Archery	2	0.3%	32	6.3%
Lagrange	Archery	1	0.2%	85	1.2%
Lake	Archery	0	0.0%	5	0.0%
LaPorte	Archery	1	0.2%	153	0.7%
Lawrence	Both	18	2.8%	354	5.1%
Madison	Not Open	---	---	2	---

Table 5 con't on next page.

Table 5. Fall and spring wild turkey harvests in Indiana, 2006. ^a

County	Type of Fall Season ^b	2006 Fall Harvest	Percent of Fall Harvest	2006 Spring Harvest	Percent of Fall / Spring
Marion	Not Open	---	---	0	---
Marshall	Archery	11	1.7%	182	6.0%
Martin	Both	16	2.5%	293	5.5%
Miami	Archery	1	0.2%	17	5.9%
Monroe	Both	24	3.7%	298	8.1%
Montgomery	Archery	1	0.2%	66	1.5%
Morgan	Archery	1	0.2%	72	1.4%
Newton	Archery ^c	0	0.0%	75	0.0%
Noble	Archery	2	0.3%	12	16.7%
Ohio	Both	13	2.0%	165	7.9%
Orange	Both	22	3.4%	440	5.0%
Owen	Both	23	3.6%	313	7.3%
Parke	Archery	9	1.4%	444	2.0%
Perry	Both	20	3.1%	470	4.3%
Pike	Both	27	4.2%	333	8.1%
Porter	Archery	0	0.0%	15	0.0%
Posey	Archery	4	0.6%	101	4.0%
Pulaski	Archery	0	0.0%	85	0.0%
Putnam	Archery	4	0.6%	199	2.0%
Randolph	Not Open	---	---	0	---
Ripley	Both	11	1.7%	304	3.6%
Rush	Not Open	---	---	3	---
St. Joseph	Archery	5	0.8%	111	4.5%
Scott	Both	13	2.0%	199	6.5%
Shelby	Not Open	---	---	0	---
Spencer	Both	12	1.9%	306	3.9%
Starke	Archery	6	0.9%	191	3.1%
Steuben	Archery	13	2.0%	215	6.0%
Sullivan	Archery	5	0.8%	288	1.7%
Switzerland	Both	23	3.6%	562	4.1%
Tippecanoe	Archery	1	0.2%	47	2.1%
Tipton	Not Open	---	---	0	---
Union	Archery	0	0.0%	81	0.0%
Vanderburg	Archery	1	0.2%	16	6.3%
Vermillion	Archery	6	0.9%	152	3.9%
Vigo	Archery	9	1.4%	190	4.7%
Wabash	Archery	0	0.0%	57	0.0%
Warren	Archery	1	0.2%	132	0.8%
Warrick	Both	28	4.3%	349	8.0%
Washington	Both	24	3.7%	372	6.5%
Wayne	Archery	0	0.0%	29	0.0%
Wells	Not Open	---	---	1	---
White	Archery	0	0.0%	26	0.0%
Whitley	Not Open	---	---	8	---
Totals		2,652	100.0%	13,193	20.1%

^a Harvest totals from check station reports.^b Archery = archery only. Both = archery and firearms.^c Only part of county open; e.g., western Greene County archery only, eastern Greene both archery and firearms; or Newton half open to archery only.

Figure 2.

2006 Fall Turkey Harvest

